TECHNICAL REVIEW DOCUMENT FOR OPERATING PERMIT 950PBA029

to be issued to:

Colorado Interstate Gas (CIG) Company Flank Compressor Station Baca County Source ID 0090001

Prepared by Doris Jung on June 15, 1998

I. Purpose

This document establishes the basis for decisions made regarding the Applicable Requirements, Emission Factors, Monitoring Plan and Compliance Status of Emission Units covered within the Operating Permit proposed for this site. It is designed for reference during review of the proposed permit by the EPA and during Public Comment. The conclusions made in this report are based on information provided in the original application submittal of February 1, 1995 and additional information submitted on June 22, 1995, January 7, 1998, February 25, 1998, March 18, 1998, May 8, 1998, and June 5, 1998. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

On April 16, 1998 the Colorado Air Quality Control Commission directed the Division to implement new procedures regarding the use of short term emission and production/throughput limits on Construction permits. These procedures are being directly implemented in all operating permits that had not started their Public Comment period as of April 16, 1998. All short term emission and production/throughput limits that appeared in the construction permits associated with this facility that are not required by a specific State or Federal standard or by the above referenced Division procedures have been deleted and all annual emission and production/throughput limits converted to a rolling 12 month total. Note that, if applicable, appropriate modeling to demonstrate compliance with the National Ambient Air Quality Standards was conducted as part of the Construction Permit processing procedures. If required by this permit, portable monitoring results and/or EPA reference test method results will be multiplied by 8760 hours for comparison to annual emission limits unless there is a specific condition in the permit restricting hours of operation.

II. Source Description

This source is classified as a natural gas transmission facility defined under Standard Industrial Classification 4922. Natural gas is injected into the Flank Storage Field in the summer and is withdrawn during the winter season. After withdrawal, the gas is dehydrated by triethylene glycol dehydrators on site and then pumped into the main line

for market using natural gas fueled internal combustion engine driven compressors.

The facility is located approximately 16 miles south of Stonington in Baca County, in an area designated as attainment for all criteria pollutants. The facility is located within 50 miles of Oklahoma and Kansas. There are no Federal Class I areas within 100 kilometers of the facility. Facility wide emissions for pollutants of concern, Nitrogen Oxides (NO_x), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), and Hazardous Air Pollutants (HAPs) in tons per year (tpy) are as follows:

Pollutant	Potential to Emit (tpy)	Actual Emissions (tpy)
NO _x	262.7	127.3
CO	311.1	142.7
VOC	136.8	119
HAPs	25.9	24.3

Facility wide potential emissions and actual emissions are based on data submitted with the Title V Operating Permit application and revised Air Pollution Emission Notices (APENs) submitted February 25, 1998.

This source is considered to be a major source in an attainment area (Potential to Emit > 250 tons per year) and is considered major for purposes of Prevention of Significant Deterioration (PSD) regulations. Modifications up to this point in time have not triggered significance levels which would bring about PSD Review. Future modifications to this facility which are in excess of significance levels as defined in Colorado Regulation No. 3, Part A, Section I.B.58 will result in the application of the PSD review requirements.

This facility currently is not subject to any Maximum Achievable Control Technology (MACT) standards. CIG indicated that this facility is not subject to 112(r). CIG certified to operating in compliance with all applicable requirements at the time of their application submittal on February 1, 1995.

III. Emission Sources

The following sources are specifically regulated under the terms and conditions of the Operating Permit for this Site:

Unit E001 - Superior 4-Cycle Standard Rich Burn Internal Combustion Engine, Model 6FTLA, S/N: 295619, 7400 Btu/hp-hr, 825 hp, Natural Gas Fired.

1. Applicable Requirements

This unit was first placed in service in 1993 and is permitted under the initial approval Colorado Construction Permit 93BA340. Based upon the Final Approval Certification submitted by CIG, the Division granted Final Approval for Colorado Construction Permit 93BA340 on February 9, 1998. The fuel use of the engine limited by Colorado Construction Permit 93BA340 at 6,164 scf/hr and 54 MMscf/yr is based on the higher

heating value of the fuel. It was brought to the Division's attention that the derivation of the engine heat rate (Btu/hp-hr) is based on the lower heating value of the fuel, as confirmed by the manufacturer. To be consistent with the heating value basis, fuel use limits and emissions may be calculated by using the lower heating value of the fuel. The applicable requirements incorporated into the Operating Permit for this engine are as follows:

- NO_x: 15.9 tpy (Colorado Construction Permit 93BA340)
- CO: 29.5 tpy (Colorado Construction Permit 93BA340)
- VOC: 6.4 tpy (Colorado Construction Permit 93BA340)
- Fuel use limited to 60 MMscf/yr
- 20% Opacity limitation during normal operations (Regulation No. 1, Section II.A.1)
- APEN Reporting (Regulation No. 3, Part A, Section II)

2. Emission Factors

Emissions from this engine are produced during the combustion process, and are dependent upon the air to fuel ratio adjustment, engine design specifications, and specific properties of the natural gas being burned. The pollutants of concern are NO_x CO and VOC. For permitted engines, it is Division policy to convert horsepower-based emission factors to fuel-based emission factors. The emission factor conversion is accomplished by using the horsepower-based emission factor and the heat rate of the engine as shown in the attached Engineering Calculation Worksheet. The resulting fuel-based emission factors for CIG's proposed factors and AP-42 emission factors for 4-cycle rich-burn reciprocating engines from Table 3.2-1 (EPA Compilation of Air Pollutant Emission Factors, October 1996) are as follows:

Pollutant Pollutant	AP-42 (lb/MMBtu)	CIG's (lb/MMBtu)
NO_x	2.3	0.6
CO	1.6	1.1
VOC	0.03	0.24

CIG's proposed emission factors are lower than the AP-42 factors for NO_x and CO, and higher for VOC.

3. Monitoring Plan

Emissions will be determined by multiplying CIG's emission factors by the fuel consumption of the engine and the lower heating value of the fuel. CIG will be required to conduct the emissions calculations on a monthly basis with semi-annual reports and an annual compliance certification.

Since the NO_x and CO compliance emission factors for this engine are less than AP-42 emission factors, quarterly portable monitoring is required as indicated by the Internal Combustion engine monitoring grid developed by the Division (attached). Failure of a portable analysis indicates a possible exceedance and a re-test is required using calibration gasses. Failure to show compliance during subsequent retests requires

notification of the Division and an EPA Reference Method stack test must then be performed.

The Opacity standard of 20% will be demonstrated by the use of natural gas. Inspectors may verify this with EPA Method 9 opacity readings, if necessary.

A revised APEN must be submitted to the Division as required by Regulation No. 3, Part A, Section II.C.

4. Compliance Status

A current APEN reporting actual criteria emissions for the 1994 data year is on file with the Division for this engine. No records indicating non-compliance were found in a review of the facility's APCD files and the source certified in their application that they are currently in compliance with all applicable requirements. Therefore, this unit is currently considered to be in compliance with all applicable requirements.

Units E002, E003, E004 - Superior 4-Cycle Standard Rich Burn Internal Combustion Engine, Model 16G825, S/N: 278739, 278729, and 295039, 7844 Btu/hp-hr, 1475 hp, Natural Gas Fired.

1. Applicable Requirements

Units E002, E003, E004 were first placed in service in 1981, 1981, and 1982, respectively. They are permitted under final approval Colorado Construction Permits 12BA485-1, 2, 3.

EPA issued a PSD permit on March 31, 1980 for these engines. The PSD permit only covered NO_x emissions, which is consistent with the PSD rule in place at that time. The EPA PSD NO_x limit for these engines has been included in the Operating Permit.

CO emissions were originally estimated with the AP-42 factor of 1.4 g/bhp-hr when the Colorado Construction Permits 12BA485-1, 2, 3 were initially issued August 9, 1979. The AP-42 CO emission factor was revised to 8.6 bhp-hr in July 1993. Revised APENs submitted with the Title V application on February 1, 1995 used the latest AP-42 factor and reported 109.1 tpy CO per engine. Total emissions for the three engines exceeded 250 tpy, thus triggering PSD review. The Division notified CIG that these engines must undergo PSD review or obtain a synthetic minor permit. In the letter submitted to the Division on June 5, 1998, CIG requested to limit the hours of operation of the three engines to 13,850 hours per year and total CO emissions to 225 tpy using an emission factor of 10 g/hp-hr to avoid PSD review. Therefore, limits for NO_x , CO and VOC have been adjusted to reflect the limited hours of operation.

The applicable requirements incorporated into the Operating Permit for **all three** engines are as follows:

NO_x: 225 tpy,

46.17 lb/hr (EPA PSD permit issued March 31, 1980)

CO: 225 tpyVOC: 4.5 tpy

- Fuel use limited to 169.6 MMscf/yr
- Hours of operation limited to 13,850 hours per year
- 20% Opacity limitation during normal operations (Regulation No. 1, Section II.A.1)
- APEN Reporting (Regulation No. 3, Part A, Section II)

2. Emission Factors

Emissions from these engines are produced during the combustion process, and are dependent upon the air to fuel ratio adjustment, engine design specifications, and specific properties of the natural gas being burned. The pollutants of concern are NO_x CO and VOC. For permitted engines, it is Division policy to convert horsepower-based emission factors to fuel-based emission factors. The emission factor conversion is accomplished by using the horsepower-based emission factor and the heat rate of the engine as shown in the attached Engineering Calculation Worksheet. The resulting fuel-based emission factors for the manufacturer's factors and AP-42 emission factors for 4-cycle rich-burn reciprocating engines from Table 3.2-1 (EPA Compilation of Air Pollutant Emission Factors, October 1996) are as follows:

<u>Pollutant</u>	AP-42 (lb/MMBtu)	Manufacturer's (lb/MMBtu)
NO _x	2.3	2.81
CO	1.6	2.81
VOC	0.03	0.056

3. Monitoring Plan

Emissions will be determined by multiplying CIG's emission factors by the fuel consumption of the engine and the lower heating value of the fuel. CIG will be required to conduct the emissions calculations on a monthly basis with semi-annual reports and an annual compliance certification, which is consistent with the monitoring grid developed by the Division (attached).

Given the variation in emission factors used to estimate emissions from these engines and lack of Division approved emissions tests, the source shall be required to stack test each engine for the initial demonstration of compliance with CO and NO_x compliance emission factors and the permit limits within 180 days of permit issuance and perform quarterly portable monitoring for CO and NO_x for all three engines.

The Opacity standard of 20% will be demonstrated by the use of natural gas. Inspectors may verify this with EPA Method 9 opacity readings, if necessary.

A revised APEN must be submitted to the Division as required by Regulation No. 3, Part A, Section II.C.

4. Compliance Status

Current APENs reporting actual criteria emissions for the 1994 data year are on file with the Division for these engines. No records indicating non-compliance were found in a review of the facility's APCD files and the source certified in their application that they are currently in compliance with all applicable requirements. Therefore, these units are currently considered to be in compliance with all applicable requirements.

Unit E005 - Superior 4-Cycle Low NO_x Internal Combustion Engine, Model 6FTLA, S/N: 321619, 7200 Btu/hp-hr, 1500 hp, Natural Gas Fired.

1. Applicable Requirements

This unit was first placed in service in 1988 and is permitted under the initial approval Colorado Construction Permit 92BA348. Based upon the Final Approval Certification submitted by CIG, the Division granted Final Approval for Colorado Construction Permit 92BA348 on February 9, 1998. The fuel use of the engine limited by Colorado Construction Permit 92BA348 at 10,913 scf/hr and 95.6 MMscf/yr is based on the higher heating value of the fuel. It was brought to the Division's attention that the derivation of the engine heat rate (Btu/hp-hr) is based on the lower heating value of the fuel, as confirmed by the manufacturer. To be consistent with the heating value basis, fuel use limits and emissions may be calculated by using the lower heating value of the fuel. The applicable requirements incorporated into the Operating Permit for this engine are as follows:

- NO_x: 21.7 tpy (Colorado Construction Permit 92BA348)
- CO: 56.5 tpy (Colorado Construction Permit 92BA348)
- VOC: 13.0 tpy (Colorado Construction Permit 92BA348)
- Fuel use limited to 109 MMscf/yr
- 20% Opacity limitation during normal operations (Regulation No. 1, Section II.A.1)
- APEN Reporting (Regulation No. 3, Part A, Section II)

2. Emission Factors

Emissions from this engine are produced during the combustion process, and are dependent upon the air to fuel ratio adjustment, engine design specifications, and specific properties of the natural gas being burned. The pollutants of concern are NO_x CO and VOC. For permitted engines, it is Division policy to convert horsepower-based emission factors to fuel-based emission factors. The emission factor conversion is accomplished by using the horsepower-based emission factor and the heat rate of the engine as shown in the attached Engineering Calculation Worksheet. The resulting fuel-based emission factors for CIG's proposed factors and AP-42 emission factors for 4-cycle lean-burn reciprocating engines from Table 3.2-1 (EPA Compilation of Air Pollutant Emission Factors, October 1996) are as follows:

<u>Pollutant</u>	AP-42 (lb/MMBtu)	CIG's (lb/MMBtu)
NO _x	3.2	0.46

CO	0.42	1.2	
VOC	0.18	0.28	

CIG's emission factors are higher than the AP-42 factors for CO and VOC, and lower for NO_v.

3. Monitoring Plan

Emissions will be determined by multiplying CIG's emission factors by the fuel consumption of the engine and the lower heating value of the fuel. CIG will be required to conduct the emissions calculations on a monthly basis with semi-annual reports and an annual compliance certification.

Since the $\mathrm{NO_x}$ compliance emission factor for this engine is less than AP-42 emission factor, quarterly portable monitoring is required as indicated by the Internal Combustion engine monitoring grid developed by the Division (attached). Flue gas analyzer testing for CO will also be required because the relationship between $\mathrm{NO_x}$ and CO emission rates from reciprocating engines is critical for determining engine operating condition. Failure of a portable analysis indicates a possible exceedance and a re-test is required using calibration gasses. Failure to show compliance during subsequent retests requires notification of the Division and an actual EPA Reference Method stack test must then be performed.

The Opacity standard of 20% will be demonstrated by the use of natural gas. Inspectors may verify this with EPA Method 9 opacity readings, if necessary.

A revised APEN must be submitted to the Division as required by Regulation No. 3, Part A, Section II.C.

4. Compliance Status

A current APEN reporting actual criteria emissions for the 1994 data year is on file with the Division for this engine. No records indicating non-compliance were found in a review of the facility's APCD files and the source certified in their application that they are currently in compliance with all applicable requirements. Therefore, this unit is currently considered to be in compliance with all applicable requirements.

Units D001 and D002 - Olman Triethylene Glycol Dehydrator (East and West), Model Enertek, S/N: 41826, 5 lb water per MMscf, 15 MMscf/day capacity.

1. Applicable Requirements

These units were first placed in service in 1992 and are permitted under the initial approval Colorado Construction Permits 95BA518-1, 2. Based upon the Final Approval Certification submitted by CIG, the Division granted Final Approval for Colorado Construction Permits 95BA518-1, 2 on February 9, 1998. These units are only used when field gas is withdrawn

from the gas fields. CIG requested changes in throughput and emissions for these dehydrators in revised APENs submitted February 25, 1998. The applicable requirements incorporated into the Operating Permit for **each** dehydrator are as follows:

- VOC: 10.2 tpy
- Natural gas throughput limited to 2,250 MMscf/yr
- Hours of operation limited to 3,600 hours per year
- APEN Reporting (Regulation No. 3, Part A, Section II)

2. Emission Factors

Triethylene glycol is contacted with the natural gas stream to remove moisture. This mixture is heated in the still portion of the unit which drives off the water and some entrained VOC through the still vent. Emissions from this process are typically predicted using the Gas Research Institute's GLYCalc Model Version 3.0 or higher. Emission factors of VOC and various HAPs are dependent upon the variables input into this Model. These variables include glycol recirculation rate, glycol consumption rate, cubic feet of gas processed, inlet gas temperature, and percentage breakdown by weight of constituents in the natural gas. The heaters for these units are rated at 0.25 MMBtu/hr and fall under the insignificant activity category of Regulation No. 3, Part C, Section II.E.3.k. Therefore, emissions from the heaters are considered an insignificant activity for the Operating Permit.

3. Monitoring Plan

CIG will use the GRI GLYCalc Model Version 3.0 or higher, as necessary, to predict monthly emissions of VOC and HAPs from the still vent of these dehydration units and to determine compliance with VOC emission limitations. Daily recording of inlet gas temperature, twice per week recording of glycol recirculation rate, and twice per withdrawal period analysis of the gas composition, will be conducted as outlined in Condition 4.1 of the Draft Operating Permit to compare to established worst-case parameters. Frequency of extended gas analyses shall move to annual after the first year if BTEX concentrations remain below the comparison criteria. Annual extended gas analysis is acceptable since HAP emissions are not close to the 10/25 tpy major source level. Frequency will revert back to twice per withdrawal period if any of the BTEX constituents exceed the comparison criteria for any analysis. Frequency will remain twice per withdrawal period until analyses indicates no exceedances for two consecutive tests, at which time required frequency will move to annual.

A revised APEN must be submitted to the Division as required by Regulation No. 3, Part A, Section II.C.

4. Compliance Status

Current APENs reporting actual criteria emissions for the 1997 data year are on file with the Division for these units. No records indicating non-compliance were found in a review of the facility's APCD files and the source certified in their application that they are currently in compliance with all applicable requirements. Therefore, these units are currently considered to be in compliance with all applicable requirements.

Unit D003 - Olman Heath Triethylene Glycol Dehydrator (Central), S/N: 296110, 5 lb water per MMscf, 135 MMscf/day capacity.

1. Applicable Requirements

This unit was first placed in service in 1989 and is permitted under the final approval Colorado Construction Permit 12BA485-5. This unit is only used when field gas is withdrawn from the gas fields. CIG requested changes in throughput and emissions for this dehydrator in a revised APEN submitted February 25, 1998. The applicable requirements incorporated into the Operating Permit for this dehydrator are as follows:

- VOC: 15.5 tpy
- Natural gas throughput limited to 20,250 MMscf/yr
- Hours of operation limited to 3,600 hours per year (Colorado Construction Permit 12BA485-5)
- APEN Reporting (Regulation No. 3, Part A, Section II)

2. Emission Factors

Triethylene glycol is contacted with the natural gas stream to remove moisture. This mixture is heated in the still portion of the unit which drives off the water and some entrained VOC through the still vent. Emissions from this process are typically predicted using the Gas Research Institute's GLYCalc Model Version 3.0 or higher. Emission factors of VOC and various HAPs are dependent upon the variables input into this Model. These variables include glycol recirculation rate, glycol consumption rate, cubic feet of gas processed, inlet gas temperature, and percentage by weight of constituents in the natural gas. The heater for this unit is rated at 6 MMBtu/hr and does not fall under the insignificant activity category of Regulation No. 3, Part C, Section II.E.3.k. However, since uncontrolled emissions of any criteria pollutant from the heater are under the two tons per year, the emissions from the heater is considered an insignificant activity under Regulation No. 3, Part C, Section II.E.3.a for the Operating Permit.

3. Monitoring Plan

CIG will use the GRI GLYCalc Model Version 3.0 or higher, as necessary, to predict monthly emissions of VOC and HAPs from the still vent of this dehydration unit and to determine compliance with VOC emission limitations. Daily recording of inlet gas temperature, twice per week recording of glycol recirculation rate, and twice per withdrawal period analysis of the gas composition, will be conducted as outlined in Condition 5.1 of the Draft Operating Permit to compare to established worst-case parameters. Frequency of extended gas analyses shall move to annual after the first year if BTEX concentrations remain below the comparison criteria. Annual extended gas analysis is acceptable since HAP emissions are not close to the 10/25 tpy major source level. Frequency will revert

back to twice per withdrawal period if any of the BTEX constituents exceed the comparison criteria for any analysis. Frequency will remain twice per withdrawal period until analyses indicates no exceedances for two consecutive tests, at which time required frequency will move to annual.

A revised APEN must be submitted to the Division as required by Regulation No. 3, Part A, Section II.C.

4. Compliance Status

A current APEN reporting actual criteria emissions for the 1997 data year is on file with the Division for this unit. No records indicating non-compliance were found in a review of the facility's APCD files and the source certified in their application that they are currently in compliance with all applicable requirements. Therefore, this unit is currently considered to be in compliance with all applicable requirements.

Unit D004 - Olman Heath Triethylene Glycol Dehydrator (Field), S/N: 30576, 5 lb water per MMscf, 9 MMscf/day capacity.

1. Applicable Requirements

This unit was first placed in service in 1985 and is permitted under the initial approval Colorado Construction Permit 95BA518-3. Based upon the Final Approval Certification submitted by CIG, the Division granted Final Approval for Colorado Construction Permit 95BA518-3 on February 9, 1998. CIG requested changes in throughput and emissions for this dehydrator in a revised APEN submitted February 25, 1998. The applicable requirements incorporated into the Operating Permit for this dehydrator are as follows:

- VOC: 16.7 tpy
- Natural gas throughput limited to 3,285 MMscf/yr
- APEN Reporting (Regulation No. 3, Part A, Section II)

2. Emission Factors

Triethylene glycol is contacted with the natural gas stream to remove moisture. This mixture is heated in the still portion of the unit which drives off the water and some entrained VOC through the still vent. Emissions from this process are typically predicted using the Gas Research Institute's GLYCalc Model Version 3.0 or higher. Emission factors of VOC and various HAPs are dependent upon the variables input into this Model. These variables include glycol recirculation rate, glycol consumption rate, cubic feet of gas processed, inlet gas temperature, and percentage by weight of constituents in the natural gas. The heater for this unit is rated at 1.5 MMBtu/hr and falls under the insignificant activity category of Regulation No. 3, Part C, Section II.E.3.k. Therefore, emissions from the heater are considered an insignificant activity for the Operating Permit.

3. Monitoring Plan

CIG will use the GRI GLYCalc Model Version 3.0 or higher, as necessary, to predict monthly emissions of VOC and HAPs from the still vent of this dehydration unit and to determine compliance with VOC emission limitations. Daily recording of inlet gas temperature, twice per week recording of glycol recirculation rate, and quarterly gas analysis, will be conducted as outlined in Condition 6.1 of the Draft Operating Permit to compare to established worst-case parameters. Frequency of extended gas analyses shall move to semi-annual after the first year if BTEX concentrations remain below the comparison criteria. Frequency of extended gas analyses shall move from semi-annual to annual if BTEX concentrations remain below the comparison criteria for two consecutive semi-annual periods. Annual extended gas analysis is acceptable since HAP emissions are not close to the 10/25 tpy major source level. Frequency will revert back to quarterly if any of the BTEX constituents exceed the comparison criteria for any analysis. Frequency will remain quarterly until analyses indicates no exceedances for four consecutive tests, at which time required frequency will move to semi-annual.

A revised APEN must be submitted to the Division as required by Regulation No. 3, Part A, Section II.C.

4. Compliance Status

A current APEN reporting actual criteria emissions for the 1997 data year is on file with the Division for this unit. No records indicating non-compliance were found in a review of the facility's APCD files and the source certified in their application that they are currently in compliance with all applicable requirements. Therefore, this unit is currently considered to be in compliance with all applicable requirements.

Unit F001 - Fugitive VOC Emissions from Equipment Leaks

1. Applicable Requirements

The Division has made the determination that Fugitive VOC emissions from equipment leaks at gas compression or processing facilities must be calculated and evaluated for the appropriate permitting requirements. Fugitive VOC emissions from equipment leaks are permitted under initial Colorado Construction Permit 95BA108. Based upon the Final Approval Certification submitted by CIG, the Division granted Final Approval for Colorado Construction Permit 95BA108 on February 9, 1998. This source does not meet the definition of an Onshore Natural Gas Processing Facility in New Source Performance Standard 40CFR60 Subpart KKK; therefore, Subpart KKK does not apply to this source. A natural gas throughput limit in the Construction Permit is not included in the Operating Permit since it is not a factor in determining fugitive VOC emissions from equipment leaks. The applicable requirements are as follows:

- VOC: 60.0 tpy (Colorado Construction Permit 95BA108)
- APEN Reporting (Regulation No. 3, Part A, Section II)

2. Emission Factors

CIG has calculated emissions from equipment leaks based on emission factors from EPA's Protocol for Emission Leak Estimates (EPA 453-4/R-93-025). Factors are multiplied by the number of components of each type (e.g. Compressor Seals) and the VOC weight percentage in the organic portion of the gas stream as determined in the most recent analysis. EPA factors are given in terms of Total Organic Compounds.

3. Monitoring Plan

As a means of recordkeeping, CIG personnel must conduct an initial component count within 90 days of permit issuance to verify the existing hardware inventory. Records shall be kept of all component additions and deletions, and a running tally maintained. The calculation result will be compared to the annual VOC limit to determine compliance.

A Maintenance Plan will be required to be kept on site in order to document how leak prevention is handled throughout the year.

4. Compliance Status

A current APEN reporting actual criteria emissions for the 1994 data year is on file with the Division for fugitive emissions. No records indicating non-compliance were found in a review of the facility's APCD files and the source certified in their application that they are currently in compliance with all applicable requirements. Therefore, this unit is currently considered to be in compliance with all applicable requirements.

IV. Insignificant Activities

Emissions from Venting during Engine Overhaul

CIG submitted calculations quantifying emissions from the release of natural gas during routine periodic maintenance of the compressor engines. Assuming 2,000 ft³ of natural gas was vented from each engine once per year, emissions of VOC were determined to be well below reportable deminimis levels. This is considered an insignificant activity according to Regulation No. 3, Part C, Section II.E.3.a.

Emergency Generator

The emergency generator on site has been identified as meeting the insignificant activity criteria of Regulation No. 3, Part C, Section II.E.3.nnn.

Emergency Flare

The emergency flare on site has been identified as an insignificant activity since its emissions are less than APEN deminimis levels. This is considered an insignificant activity according to Regulation No. 3, Part C, Section II.E.3.a.

Fuel Burning Equipment

CIG identified combustion sources that qualify as insignificant activities under Regulation No. 3, Part C, Section II.E.3.k, gaseous fuel burning equipment with a design heat rate less than 5 MMBtu/hr. These units are listed in Appendix A in the Operating Permit.

Degreaser

CIG listed a degreaser as an insignificant activity since its emissions are less than APEN deminimis levels (Regulation No. 3, Part C, Section II.E.3.a.).

Storage Tanks

CIG identified storage tanks that qualify as insignificant activities under Regulation No. 3, Part C, Section II.E.3.aaa, ddd, and fff. These units are listed in Appendix A in the Operating Permit.

Landscaping Devices

CIG also listed landscaping devices that qualify as insignificant activities under Regulation No. 3, Part C, Section II.E.3.bb. These units are listed in Appendix A in the Operating Permit.

V. Alternative Operating Scenarios

CIG has indicated that replacement engines are typically not used during major engine overhaul. They are aware that any temporary or permanent replacement of engines at this site shall not be conducted without prior notification to the Division. The Division will determine whether the proposed change at the site will require a Construction Permit and/or modification of the Operating Permit. Installation of equipment not specifically identified in the Permit prior to notification to the Division shall be considered a violation subject to enforcement action.

VI. Permit Shield

The regulation citations identified as not applicable to this source in Section III of the Operating Permit are based on a condensed version of the requested Permit Shield citations as submitted with the original application for this facility. The original list contained many citations that were clearly unnecessary for the shield.

VII. Short Term Limits Deleted from Operating Permit

Construction Permit	Emission Unit	Short Term Limit
93BA340	E001	NO _x : 3.64 lb/hr
		CO: 6.73 lb/hr
		VOC: 1.46 lb/hr

Construction Permit	Emission Unit	Short Term Limit
		Fuel: 6,164 scf/hr
12BA485-1, 2, 3	E002-E004	NO _x : 28.97 lb/hr
		CO: 24.91 lb/hr
		VOC: 0.41 lb/hr
		Fuel: 9,816 scf/hr
92BA348	E005	NO _x : 4.96 lb/hr
		CO: 12.90 lb/hr
		VOC: 2.98 lb/hr
		Fuel: 10,913 scf/hr
95BA518-1, 2	D001-D002	VOC: 2.9 lb/hr
		Throughput: 15.0 MMscf/day (D001)
		Throughput: 5,714 scf/day (D002)
12BA485-5	D003	VOC: 8.8 lb/hr
		Throughput: 5,634 scf/hr (D001)
95BA518-3	D004	VOC: 6.1 lb/hr
		Throughput: 34,300 scf/day (D001)
95BA109	F001	VOC: 13.7 lb/hr
		Throughout: 6 MMscf/day